Before the

FEDERAL COMMUNICATIONS COMMISSION

In response to: )
)
Amendment of Part 97 of the Commission's ) RM-11306
)
Rules Governing the Amateur Radio Services )

Comments Supporting RM-11306
By
Richard Hacker, AH6QK

BACKGROUND AND INTRODUCTION

I have been an active radio amateur for 7 plus years, and hold the amateur call sign AH6QK. I am a practicing attorney at law, and an active Mariner. I have used various Amateur service modes to maintain my safety and well being while on the high Seas. This quickly led me to the effectiveness and efficiency of the Winlink 2000 messaging system, which has been a tremendous benefit to my safety and well being while on the high Seas. It has provided my ability to communicate with my land-based family, continually provided my exact position, and gave me invaluable weather information, elsewhere unavailable, while offshore.
Although, I speak for only myself, I do represent well over 8,700 Winlink 2000 users, worldwide. Also, now being a part of the Winlink 2000 system in Kaneohe, Oahu, Hawaii, I can attest that this digital messaging system is also important NOAA MAROB weather reporting, the Amateurs in the United Nations, to the US Coast Guard, and many other such user groups, worldwide, who use it daily, and for emergency communications. I support the ARRL Petition, RM-11306 because of the severe resections placed on any high speed digital data transfer system under the current Part 97.221(c), regarding digital operations over 500 Hz under "local and remote control."

2. DISCUSSION
These comments are in full support of the ARRL petition for rule making, RM-11306. The discussion within RM-11306 is well articulated, and may be referred to within this discussion.
Discussions regarding the proposed changes have been well vented within the amateur community, and I believe that the ARRL petition properly represents the best interests of the entire Amateur community..

Proclaimed possible Interference. I did want to comment on some very disturbing practices now taking place over the Internet meant to sway comments from the status quo. Bandwidth segmentation is certainly the most reasonable means available for mode segregation without specifically defining specific waveforms for avoiding conflict due to differences in modes of operation. There has been much discussion on the major Amateur public WEB sites, based on incorrectly stated suppositions regarding RM-11306, which is obviously purposely meant to push negativity toward those supporting the proposal. AS one example, the latest, entitled "The Email Robots are coming to the phone bands!" contain information that is mostly incorrect, in my opinion, and contain very little factual content, but does place emotionally disturbing and purposely negative

information in the hands of bystanders, who would not know the difference. This is done to motivate a negative comment to the FCC since they provide a link to the FCC comment filing section. Such information such as "40 Email robots will take up 40 x 5 = 200 kHz of the 20 meter phone band, which is 80% of the phone band!" are just inappropriate when considering that the 24 domestic "Winlink" stations, under local or remote control ("semi-automatic,") currently operate within the current narrow Part 97.221 band limits since they are more than 500 Hz in bandwidth. Currently, AM, and image are allowed in the "phone bands," and there are most certainly more than 24 such stations. Obviously, this has not had a negative impact on any operations within these band segments, and with a proper voluntary band plan, modes of compatible bandwidth will certainly continue to have no negative impact in the future. RM-11306 certainly properly prepares the US Amateur service for the next decade, and not meant to restrict comments about only current operations. However, by reviewing the comments regarding "ROBOTS," it is apparent that such promotional efforts, real or not, have spawned many negative brief comments regarding a subject that has little impact on the results proclaimed by RM-11306.

Having been on the high Seas myself, I can testify that the passive signal detection now used with Winlink 2000 operating only under local or remote control, is certainly adequate to stop most interference situations. Granted, there may be an occasional effect for stations not being heard by the initiating control operator, but as such signal detection technology becomes more readily available, and is incorporated into such operations, there is no reason for such "dramatic" concern. When considering the same "hidden transmitter effect" during the average Amateur contest, it remains irrelevant. Without the ability to continue the development and operations provided by high speed data transfer, the Amateur service will truly be lacking in modern communications.

Greater Freedom to Experiment. Specifying only the maximum "occupied" bandwidth of a signal waveform provides the freedom necessary to experiment with new technologies, and to properly define existing protocols without the need to apply for authorization. Much discussion is about protecting the current environment without adequate consideration for providing the opportunity to experiment with not-yet-developed technologies. Such enabling technologies may only be developed if such an opportunity is present for their actual use. RM-11306 provides that opportunity. Specifically, the freedom to combine voice, voice messaging, text, images, and other such binary data in any bandwidth segment provided for its use will modernize the current rules, and encourage the further development of the radio art.

3. Conclusion. Although there is great fear expressed by many that the proposed petition will cause existing and new modes to interfere with their current modes of operation. Such is the nature of change. The potential for incompatible protocols, which may result in conflicting interference, could and should be properly addressed by volunteer band planning, which could and should be the responsibility of those using the Amateur service. The FCC will certainly maintain mechanisms to deal with deliberate and malicious interference and other proper operations as described in the Part 97 rules.

Major Amateur WEB reflectors are currently expressing the fear that current and future "semi-automatic" operations will proliferate the band segments with "robot" stations that will run over all other users. Here, semi-automatic refers to those operations under "local or remote control" per Part 97.221(c) and not "automatic control." Such transmissions are initiated by a live control operator. This highly promoted fear reflects a vast misunderstanding of the

nature of such digital operations. After all, any digital communication that takes place at speeds faster than one can type interactively, is by its very nature going to be "semi-automatic." If an operator initiates a connection between two stations, sends or receives prepared and stored data, and then drops the connection, it does not matters if a second operator is observing the process at the passive end of the link. Also, a very critically important function of such high speed data transfer operation is the ability to greatly reduce the "footprint" that such a communication makes on the bands. It is well known that modern efficient error free high speed data transfer protocols have a lower bandwidth per time product than a keyboard-to-keyboard interactive digital mode even considering the much narrower bandwidth of the later. Efficient higher speed data modes make the same bands available to more users. Greater access is provided to the amateur radio services using already prepared off-line text in semi-automatic modes than by keyboard, SSB, or CW modes. This is not to discredit any existing mode, or suggest that any such operations will dominate the future, but to illustrate the enhanced value of new and enabling technologies. Currently, there are thousands of users in the Amateur service using high speed data transfer modes to include Winlink 2000, and are doing so with much less of an impact on available spectrum than an equivalent number of users would have using keyboard-to-keyboard, CW, SSB or any other available mode.

We are just beginning to provide high speed digital technologies to the Amateur service, and it is clear that the ARRL petition provides an opportunity in the United States for a more rapid development of high speed digital technologies while protecting existing modes and services. Therefore, due to the pressing necessity to continue to provide an opportunity for further development of the radio art, I highly endorse the ARRL petition and recommend that it be adopted for the Amateur service.

Respectively submitted,

Richard Hacker, AH6QK